23/qs/C

Unnamed Silt Loam 77-Ida-0527

Classification -- medial over loamy, mixed, frigid Typic Vitrandept.

General Site Characteristics

Location -- Benewah County, Idaho, upper Mannering Creek, in the southeast ¼ of section 23, T.43N., R.3W.; described -- June 28, 1977, by Bill Sexton; topography -- moderately rolling hills, upper 1/3 of slope; slope -- 29 percent; aspect -- north, 344 degrees; elevation -- 1150 meters; parent material -- volcanic ash over siltite; climate -- subhumid with cool, dry summers and cool, wet winters estimated mean annual precipitation 102 to 114 centimeters, estimated mean annual temperature 7°C; drainage -- well drained; permeability -- medium; erosion -- none to slight; vegetation or use -- Thuja plicata/ Pachistima myrsinites habitat type.

Pedon Description

O1&2 5-0 centimeters (2-0 inches). Forest litter.

B21ir 0-15 centimeters (0-6 inches). Yellowish brown (10YR 5/4) silt loam, brown (7.5YR 4/4) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine interstitial pores; many very fine, fine and medium roots; clear wavy boundary.

B22ir 15-36 centimeters (6-14 inches). Light yellowish brown (10YR 6/4) silt, brown (7.5YR 4/4) moist; moderate medium granular and weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine interstitial pores; many very fine, fine, medium and coarse roots; clear wavy boundary.

B23ir 36-56 centimeters (14-22 inches). Very pale brown (10YR 7/4) silt loam, dark yellowish brown (10YR 4/4) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine interstitial pores; many very fine, fine, medium, and coarse roots; abrupt wavy boundary.

IIB24 56-86 centimeters (22-34 inches). Pale brown (10YR 6/3) gravelly silt loam, brown (10YR 4/3) moist; weak and moderate medium subangular blocky structure; friable, slightly sticky and slightly plastic; many very fine tubular pores; common fine and many medium and coarse roots; few thin clay films in pores and on ped faces; 15 percent gravel; clear wavy boundary.

IIC 86-114+ centimeters (34-45+ inches). Very pale brown (10YR 8/3) very gravelly silt loam, yellowish brown (10YR 5/4) moist; massive; friable, slightly sticky and slightly plastic; many very fine tubular pores; common fine roots; 35 percent gravel, 20 percent cobble.

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Date: April 1978

Sample No.	Horizon	Depth	pH paste	ECX10^3	PW at Saturation	Available P	Sesquioxides Di-Citrate Fe	Sesquioxides Extract Al	Sesquioxides Pyrophosphate Fe	Sesquioxides Extract Al
		cm		mmhos/cm	%	ppm		%		
1	01&2	5-0	-	-	-	-				
2	B21ir	0-15	5.9	0.3	80	3.5				
3	B22ir	15-36	6.4	0.2	76	6.5				
4	B23ir	36-56	5.8	0.2	74	0.2				
5	IIB24	56-86	5.6	0.2	27	0.8				
6	IIC	86-114+	5.5	0.2	28	0.1				

Sample No.	Exchangeable Ions Ca	Mg	Na	K	Ext. Acidity H	CEC	Base Saturation	OM	C	N	C:N	Soil Fraction	NaF pH
	meq/100 gms						%	%			ratio		
1	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3.9	0.7	0.1	1.0	15.2	23.3	27	3.6	2.1	0.16	13	0.86	10.5
3	3.9	0.6	0.1	1.0	15.0	22.2	27	2.4	1.4	0.10	14	0.89	10.7
4	2.1	0.5	0.3	0.7	10.9	14.5	25	1.3	0.7	0.05	14	0.92	10.6
5	3.6	0.8	0.1	0.4	1.4	7.2	78	0.4	0.2	0.03	7	0.77	9.3
6	3.0	0.5	0.1	0.1	nil	2.0	100	0.1	0.1	0.01	10	0.37	9.0

Remarks: CECs leached with 10% acidified NaCl.
Nitrogens and CECs ran on Technicon.

Analysis by: Nancy Parrott

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Depth	Particle Size Distribution (mm)								Gravel & Stone		Textural
	VCS	CS	MS	FS	VFS	TS	TSi	TC	> 2 mm		Classes
	2-1.0	1-0.5	0.5-0.25	0.25-0.1	0.1-0.05	2-0.05	0.05-0.002	< 0.002	wt.	vol.	
cm	%								%		
5-0	-	-	-	-	-	-	-	-	-	-	-
0-15	0.93	0.70	0.41	2.01	7.74	11.78	78.11	10.11	15	4	Silt loam
15-36	0.21	0.38	0.21	1.51	7.99	10.31	81.80	7.89	11	3	Silt
36-56	0.39	0.32	0.27	2.83	14.60	18.40	75.91	5.69	8	2	Silt loam
56-86	0.93	1.37	0.92	3.48	13.26	19.96	71.66	8.38	23	15	Gr. silt loam
86-114+	0.87	0.56	0.40	3.40	24.33	29.56	66.74	3.70	63	59	V. gr. silt loam

Depth	Silt Size Distribution (mm)			Bulk Density		Water Content		Liquid Limit	Plastic Limit	Plastic Index
	CoSi	MSi	FSi	Clod	Core	1/3 Bar	15 Bar			
	0.05-0.02	0.02-0.005	0.005-0.002							
cm	%			g/cc		%		%		
5-0				-	-	-	-			
0-15				no clods	0.64	46.0	13.2			
15-36				no clods	0.66	51.0	12.0			
36-56				no clods	0.67	47.7	8.3			
56-86				1.67	1.53	23.6	4.8			
86-114+				2.22	no core	16.2	2.2			

Remarks: Centrifuge method, 5% Na hexametaphosphate added, sonified.
When two values for BD present, they were averaged to compute % vol. gravel.

Analysis by: Anita Falen